

Amendments To The Specification:

Please insert the following drawing descriptions for new figures 5-7 at page 3, after the Figure 4 description:

Fig. 5 schematically shows a perspective view of a fork-lift reach truck.

Fig. 6 very schematically shows a side view of the front portion of the fork-lift reach truck of
Fig. 5.

Fig. 7 Shows a block diagram for the operation of the fork-lift reach truck of Fig. 5.

Please insert the following into the specification on page 4, following line 27:

The fork-lift reach truck shown in Fig. 5 is of a conventional construction and has a driving portion 10 and a load-carrying portion 12. The load-carrying portion 12 has a mast 14 which can have a plurality of mast sections, for example, and can be extracted to a height of 12 m or higher, for example. The load-carrying portion 12 also has a load-carrying means which is guided on the mast 14 in a height-adjustable fashion. In Fig. 5, merely one prong 16 of a load-carrying fork can be seen which is mounted on a carriage which is not shown and, in turn, is horizontally displaceable. The guide required for this purpose is mounted in a height-adjustable fashion on the mast 14 as is known as such for fork-lift trucks. The driving portion 10 has mounted thereon wheel arms which extend at a parallel distance on either side of the mast 14. One wheel arm can be seen at 18 in Fig. 5. The wheel arms 18 support load-carrying wheels each. A steerable driving wheel is shown at 19.

The mast 14 is horizontally moved away from and towards the driving portion 10 by means of a guide which is not shown in detail. To this end, an control element, which is not shown, is provided in the cabin of the driving portion 10 to drive the linear mast extractor. Further, there is an control element in the cabin for the lifting and lowering operation of the load-carrying fork and the mast 14. In addition, the mast 14 is also-variable in its inclination by means of an appropriate inclination drive. The inclination drive, in turn, can be actuated via a separate control element. Finally, there is also an operating member in the cabin to actuate the side shift described.

The individual displacing motions are indicated by two-sided arrows in Fig. 6. The two-sided arrow 20 indicates the adjustability in height of a horizontal guide 22 for a side shift 24, the side shift being connected to the back 26 of a load-carrying fork which is generally designated 28. The two-sided arrow 30 indicates the extraction of the mast and the curved two-sided arrow 32 indicates the option to incline the mast 14. Finally, a curved two-sided arrow 34 indicates the change to the inclination of the prongs 16 or load-carrying fork 28. The drives for the displacing motions described are not shown in the drawing, even the one for regulating the fork inclination.

The fork 28 has associated therewith an analog inclination sensor which is designated 40 in Fig. 7. The inclination sensor determines the inclination of the prongs 16 from the horizontal line and, in the simplest case, from the mast 14 or fork-lift truck or, more specifically, the absolute inclination from the horizontal line. The inclination signal is sent to a control and regulation device 42 for the operation of the mast and load-carrying means. The inclination signal also arrives at a display 42a which is installed in the cabin of the fork-lift truck. This always allows the driver to see the inclination of the fork 28 relative to the horizontal line.

In Fig. 7, 44 designates a control element for lifting and lowering the load-carrying fork 28 or guide 22 for the shifter 24 of the load-carrying fork 28. 46 designates a control element for the inclination of the mast 14. 48 designates a control element for the advancement of the mast 14. 50 designates a control element for the actuation of the side shift 24 and, thus, for the lateral displacement of the load-carrying fork 28. 52 designates a control element for the variation of the fork inclination. 54 designates a control element, e.g. a push-button switch, the signal of which is sent to the control and regulation device 42, like those of the other control elements 44 to 52. As a consequence of the signals from the inclination sensor 40 and control element 54, the control and regulation device 42 for the drive of the inclination of the fork 28 generates an appropriate setting signal until the fork prongs 16 have taken their horizontal position. Thus, the signal of the inclination sensor 40 serves as a real signal for a control loop whereas the required signal is formed by a value which was set or was measured and stored and which corresponds to the horizontal position of the load-carrying fork.

When the control element 44 is operated in the control and regulation device it becomes also possible to initiate a procedure according to which the fork 28 is automatically moved to the horizontal line before a lifting or lowering operation is initiated.

The inclination signal from the inclination sensor 40 can also be input to an onboard computer 56. The onboard computer 56 calculates the maximum speed for the travel motor, which is not shown, in accordance with stability criteria. Known stability criteria, for example, are the weight of the load on the load-carrying fork 28, the height of the load-carrying fork 28, the inclination of the mast 14, etc. The inclination signal of the inclination sensor is another stability criterion which is entered in the onboard computer 56 to determine a modification of the maximum travel speed. It is understood that attempts are made to predetermine a maximum travel speed which is as high as possible in order to maximize the volume of goods handled. A large number of stability criteria, when taken into account, helps achieve an optimization of the stability, on one hand, and that of the travel speed, on the other.

Applicant also hereby incorporates by reference in their entirety the following copending applications filed Feb. 10, 2004, the first being entitled "A fork lift truck" with inventors Allarding, Oestmann and Duewel which claims priority to DE 10305901.6 and the second being entitled "a fork lift truck" with inventors Allarding, Oestmann and Duewel which claims priority to DE 10305900.8.